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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,942	11/21/2001	Nathaniel S. Borenstein	AIM-10302/29	2277

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EXAMINER

NGUYEN, MINH CHAU

ART UNIT PAPER NUMBER

2145

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/989,942

Applicant(s)

BORENSTEIN ET AL.

Examiner

MINH-CHAU N. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/11/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-4, 9-14, 16, 25 are rejected under 102(e) as being anticipated by Nguyen et al. (Nguyen) (US 6,304,915 B1).
2. Regarding claim 1, Nguyen teaches in an application service provider (ASP) computing environment wherein a client interacts with a remote server over a shared network, a method of increasing transaction reliability, comprising the steps of:
 - maintaining a list of critical transactions (Col. 15, L. 11-17);
 - locally caching at least certain processing capabilities associated with the application (Nguyen teaches the paywindow helper application is on the consumer's desktop for authorizing the payment to merchant, review their previously completed transactions, etc. . The consumer's desktop can be interpreted as a locally caching) (Col. 81, L. 44-47);
 - monitoring requests from the client to determine if a request relates to one of the critical transactions (Nguyen teaches if the client's request relates to the critical transaction, the merchant server will perform payment authorization and payment

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capture. However, if the client's request does not relate to the critical transaction (ie. update the random structures), the merchant server will not perform any payment authorization or payment capture) (Col. 15, L. 11-30 and Col. 14, L. 1-16); and, if so:

processing that transaction locally and returning a response directly to the client (Col. 15, L. 11-30 and Col. 16, L. 1-13 and Col. 20, L. 5-17).

3. Regarding claim 2, Nguyen teaches the method of claim 1, further including the step of synchronizing the transaction with the remote server after processing the request (Col. 62, L. 43-50).

4. Regarding claim 3, Nguyen teaches the method of claim 2, wherein the synchronization contains both the request and the locally issued response (Col. 16, L. 1-13 and Col. 20, L. 5-17 and Col. 62, L. 43-50).

5. Regarding claim 4, Nguyen teaches the method of claim 1, assuming the request does not relate to a critical transaction, further including the step of transparently routing the transaction to the remote server if the network is functioning and, if not, returning a failure message to the client if the network is unavailable or if the server is otherwise inaccessible (Nguyen teaches the request is updating the random structures which does not relate to the payment transaction, this request will be routed to the merchant server (it can be interpreted as a remote server). Moreover, the merchant server responds a

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refusal message to communicate if it is unavailable or cannot communicate with customer) (Col. 14, L. 1-16).

6. Regarding claim 9, Nguyen teaches the method of claim 1, wherein the application is associated with electronic commerce (Col. 75, L. 30-42).

7. Regarding claim 10, Nguyen teaches the method of claim 9, wherein the client is associated with a store having one or more point-of-sale terminals (Col. 3, L. 50-64).

8. Regarding claim 11, Nguyen teaches the method of claim 10, wherein sales transactions are identified as critical, whereas functionality related to reporting, inventory data, and customer relationship or management are considered non-critical (Col. 15, L. 56-60 and Col. 62, L. 29-36).

9. Regarding claim 12, Nguyen teaches the method of claim 9, wherein the network is the Internet (abstract and Col. 2, L. 44-46).

10. Regarding claim 13, Nguyen teaches In a network computing environment wherein a client interacts with a remote server providing access to an application, an intelligent caching router comprising:

a component containing software, hardware, or both, situated proximate to the location of the client and functioning as an interface to the network, the component

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storing a list of critical transactions and at least some of the processing capabilities associated with the application (Nguyen teaches the paywindow helper application is on the consumer's desktop for authorizing the payment to merchant, review their previously completed transactions, etc. . The consumer's desktop can be interpreted as a locally caching) (Col. 15, L. 11-35 and Col. 81, L. 44-47 and figure 1A, 1B),

the component being operative to perform the following functions:

a) monitor requests from the client to determine if a request relates to one of the critical transactions (Nguyen teaches if the client's request relates to the critical transaction, the merchant server will perform payment authorization and payment capture. However, if the client's request does not relate to the critical transaction (ie. update the random structures), the merchant server will not perform any payment authorization or payment capture) (Col. 15, L. 11-30 and Col. 14, L. 1-16); and, if so:

b) process that transaction locally and returning a response directly to the client (Col. 15, L. 11-30 and Col. 16, L. 1-13 and Col. 20, L. 5-17).

11. Regarding claim 14, Nguyen teaches the intelligent caching router of claim 13, wherein the component is further operative to synchronize the transaction with the remote server after processing the request (Col. 62, L. 43-50).

12. Regarding claim 16, Nguyen teaches the intelligent caching router of claim 13, assuming the request does not relate to a critical transaction, the component being further operative to transparently route the transaction to the remote server if the

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network is functioning and, if not, return a failure message to the client if the network is unavailable or if the server is otherwise inaccessible (Nguyen teaches the request is updating the random structures which does not relate to the payment transaction, this request will be routed to the merchant server (it can be interpreted as a remote server). Moreover, the merchant server responds a refusal message to communicate if it is unavailable or cannot communicate with customer) (Col. 14, L. 1-16).

13. Regarding claim 25, Nguyen teaches the intelligent caching router of claim 13, further including routing or firewall functionality associated with the application (Col. 77, L. 40-54).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5, 6, 17 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (Nguyen) (US 6,304,915 B1) in view of Carlson et al. (Carlson) (US 6,845,503).

15. Regarding claim 5, Nguyen fails to teach the connectivity of the network fails, taking one or more detected actions to overcome the problem. However, Nguyen

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teaches a test transaction which is used to detect a link from the VPOS to the host. (Col. 38, L. 53-55), such suggestion would motivate one ordinary skilled in the art to seek a practical and effective way to doing so. Carlson, in the same field of endeavor having closely related objectivity, teaches the step of monitoring the connectivity of the network in a background mode and, if a problem with connectivity is detected, taking one or more actions to overcome the problem (Col. 17, L. 19-30).

Thus, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated sending to different server to process the request, as suggested by Carlson, in the gateway system architecture includes support for standard Internet access routines which facilitate access to system administration information from a commercial web browser of Nguyen, to make sure the broken network connection is always recovered.

16. Regarding claim 6, Nguyen fails to teach routing to different network provider or server when the connectivity of the network has a problem. However, Nguyen teaches a test transaction which is used to detect a link from the VPOS to the host (Col. 38, L. 53-55), such suggestion would motivate one ordinary skilled in the art to seek a practical and effective way to doing so. Carlson, in the same field of endeavor having closely related objectivity, teaches the method of claim 6, wherein one of the actions used to overcome a problem associated with network connectivity includes routing traffic to an alternative network provider. (Col. 17, L. 19-30).

Thus, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated sending to different server to process the request, as suggested by Carlson, in the gateway system architecture includes support for standard Internet access routines which facilitate access to system administration information from a commercial web browser of Nguyen, to make sure the broken network connection is always recovered.

17. Regarding claim 17, Nguyen fails to teach the connectivity of the network fails, taking one or more detected actions to overcome the problem. However, Nguyen teaches a test transaction which is used to detect a link from the VPOS to the host. (Col. 38, L. 53-55), such suggestion would motivate one ordinary skilled in the art to seek a practical and effective way to doing so. Carlson, in the same field of endeavor having closely related objectivity, teaches the component being further operative to monitor the connectivity of the network in a background mode and, if a problem with connectivity is detected, take one or more actions to overcome the problem. (Col. 17, L. 19-30).

Thus, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated sending to different server to process the request, as suggested by Carlson, in the gateway system architecture includes support for standard Internet access routines which facilitate access to system administration information from a commercial web browser of Nguyen, to make sure the broken network connection is always recovered.

18. Regarding claim 27, Nguyen fails to teach when conventional backup routing fail, there is a server begins to act as a replacement for the unavailable server. However, Nguyen teaches a test transaction which is used to detect a link from the VPOS to the host. (Col. 38, L. 53-55), such suggestion would motivate one ordinary skilled in the art to seek a practical and effective way to doing so. Carlson, in the same field of endeavor having closely related objectivity, teaches when conventional backup routing fails, the application server which is part of an application server cluster to act as a surrogate for the unreachable application server on which the application service depends. (Col. 17, L. 19-30).

Thus, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated sending to different server to process the request, as suggested by Carlson, in the gateway system architecture includes support for standard Internet access routines which facilitate access to system administration information from a commercial web browser of Nguyen, to make sure the broken network connection is always recovered.

19. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (Nguyen) (US 6,304,915 B1) in view of Kearns et al. (Kearns) (5,805,798).

20. Regarding claim 7, Nguyen fails to teach establishing communication through a backup link when the connectivity of the network has a problem. However, Nguyen

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teaches a test transaction which is used to detect a link from the VPOS to the host (Col. 38, L. 53-55), such suggestion would motivate one ordinary skilled in the art to seek a practical and effective way to doing so. Kearns, in the same field of endeavor having closely related objectivity, teaches the method of claim 7, wherein one of the actions used to overcome a problem associated with network connectivity includes establishing communication through a backup link. (Col. 13, L. 55-64).

Thus, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated having the backup link when communication between line handlers fail, as suggested by Kearns, in the gateway system architecture includes support for standard Internet access routines which facilitate access to system administration information from a commercial web browser of Nguyen, to make sure the communication link is always recovered.

21. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (Nguyen) (US 6,304,915 B1) in view of Clark et al. (Clark) (US 6,233,634 B1).

22. Regarding claim 8, Nguyen fails to teach using another communication to notify the network administrator when the connectivity of the network has a problem. However, Nguyen teaches a test transaction which is used to detect a link from the VPOS to the host (Col. 38, L. 53-55), such suggestion would motivate one ordinary skilled in the art to seek a practical and effective way to doing so. Clark, in the same field of endeavor having closely related objectivity, teaches the method of claim 8,

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wherein one of the actions used to overcome a problem associated with network connectivity includes the use of an alternative communication infrastructure to notify network administrators of the problem. (Col. 28, L. 54-59).

Thus, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated using the CIM executing on the remote terminal to notify the system administrator of the failure of server, as suggested by Clark, in the gateway system architecture includes support for standard Internet access routines which facilitate access to system administration information from a commercial web browser of Nguyen, to make sure the failure of communication is always recovered.

23. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (Nguyen) (US 6,304,915 B1) in view of Fangman et al. (Fangman) (US 6,687,245 B2).

24. Regarding claim 26, Nguyen fails to teach the merchant server performs DNS lookup and DHCP service. However, Nguyen teaches the VPOS terminals, which are on the merchant server, utilize the gateway IP address and port number to communicate with the gateway. It can be interpreted as the VPOS terminals lookup the gateway IP address, so it would communicate with the gateway (Col. 101, L. 25-28), such suggestion would motivate one ordinary skilled in the art to seek a practical and effective way to doing so. Fangman, in the same field of endeavor having closely

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related objectivity, teaches a service gateway performs DNS (domain name system) lookup, and DHCP (dynamic host configuration protocol) service (Col. 8, L. 51-61).

Thus, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated having a service gateway support for DNS lookup, and DHCP service, as suggested by Fangman, in the gateway system architecture includes support for standard Internet access routines which facilitate access to system administration information from a commercial web browser of Nguyen, in order to reduce total equipment needs and providing more efficient operations.

25. Claims 15, and 18-24 list all the same elements of claims 3 and 6-12, but in component form rather than method form. Therefore, the supporting rationale of the rejection to claims 3 and 6-12 applies equally as well to claims 15, and 18-24.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH-CHAU N. NGUYEN whose telephone number is (571) 272-4242. The examiner can normally be reached on Monday-Friday from 8:00am - 4:30pm.

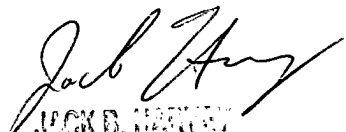
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JACK B. HARVEY can be reached on (571) 272-3896. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Minh-Chau Nguyen
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JACK B. HARTY
SUPERVISOR, PATENT EXAMINER